



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,534	04/15/2005	Jiro Kiyama	63281 (70904)	1423
21874 7590 04/28/2009 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205				
EXAMINER				
WENDMAGECN, GIRMSEW				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
04/28/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/531,534

**Applicant(s)**

KIYAMA ET AL.

**Examiner**

GIRUMSEW WENDMAGEGN

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-19 and 21 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date 2/18/09
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments with respect to claim 1-11, 14-20 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 1-11, 14-19, 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugahara et al (Pub No US 2003/0103766) further in view of Sato et al (Patent No US 5,884,004).

Regarding claim 1, 4, 8, 9, 11, 14, 21, Sugahara et al (hereinafter Sugahara) teaches method for recording, onto a recording medium, (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, the method comprising: step of dividing the AV data into partial AV data based on a unit that the AV data is reproduced by switching with the associated data, and of dividing the associated data into partial associated data based on a unit that the associated data is reproduced by switching with the AV data (see paragraph 0075); step of securing, in the recording medium, a first continuous region for

continuously storing the partial AV data and the partial associated data, which are to be reproduced by switching with each other; step of continuously recording the partial AV data and the partial associated data onto the first continuous region (see paragraph 0080); and step of recording, onto the recording medium, file system management information for (i) managing the AV data (PR. dat) and the associated data (AF.dat) as different files , and (ii) managing information for handling the AV data and the associated data as the different files (see paragraph 0106, 0111, figure10) but does not teach associated data to be reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data. However Sato teaches associated data to be reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data (see column3 line14-37).

One of ordinary skill in the art at the time the invention was made would have been motivated to reproduce associated data with AV data in same reproduction time-line (time-base) as in Sato in to Sugahara because it would improve encoding a bit stream for multi-angle connection (see Sato, column3 line 14-17).

Regarding claim2,6, Sugahara teaches the method as set forth in claim1, further comprising: a step of recording, onto the recording medium, (i) reproduction start time of the partial AV data, and (ii) correspondence information of the partial AV data and the partial associated data, both of which are disposed in the first continuous region (see paragraph 0075-0076).

Regarding claim3,7, Sugahara teaches the method as set forth in claim 1, further comprising: a step of recording, onto the recording medium, information indicating whether or not the partial associated data is recorded adjacent to the corresponding partial AV data (see paragraph0102- 0103, address).

Regarding claim10, Sugahara teaches the AV data recording apparatus as set forth in claim 9, further comprising: means for dividing, during the recording of the associated data, the associated data into partial associated data in accordance with a predetermined interval (see figure7 102a) ; means for recording, during the recording Of the associated data, the partial associated data onto the region secured by the partial reservation data which is stored in continuity with the partial AV data corresponding to the associated data (see figure 7 107-108); means for recording, onto the recording medium during the recording of the associated data, file system management information for (i) managing the associated data as a file different from respective of the AV data and the second region, and (ii) managing information for handling the associated data as a file different from the AV data and the second region (see figure 7 107-108 ; paragraph 0098).

Regarding claim5, 15,17, Sato teaches the method as set forth in claim 4, further comprising: a step of recording, during the recording of the associated data, the associated data onto the second region that is stored in continuity with relevant partial AV data (see column3 line14-37) but does not teach recording of the associated data,

file system management information for (i) managing the associated data as a file different from of the AV data and the second region, and (ii) managing information for handling the associated data as a file different from respective the AV data and the second region. However Sugahara teaches recording of the associated data, file system management information for (i) managing the associated data as a file different from of the AV data and the second region, and (ii) managing information for handling the associated data as a file different from respective the AV data and the second region (see paragraph 0106, 0111, figure10).

Regarding claim16, Both Sugahara and Sato do not teach a size of the second region is determined in consideration of occurrence of a defect. However it is old and well known in the art considering defect to determine size of storage. Therefore official notice is taken.

Regarding claim18, Sugahara teaches an apparatus, which can playback an AV data (see figure9), readable data recording medium, (i) AV data obtained by multiplexing a plurality of sets of stream data in accordance with a predetermined multiplexing rule, the method comprising: step of dividing the AV data into partial AV data based on a unit that the AV data is reproduced by switching with the associated data, and of dividing the associated data into partial associated data based on a unit that the associated data is reproduced by switching with the AV data (see paragraph 0075); step of securing, in the recording medium, a first continuous region for

continuously storing the partial AV data and the partial associated data, which are to be reproduced by switching with each other; step of continuously recording the partial AV data and the partial associated data onto the first continuous region (see paragraph 0080); and step of recording, onto the recording medium, file system management information for (i) managing the AV data (PR. dat) and the associated data (AF.dat) as different files , and (ii) managing information for handling the AV data and the associated data as the different files (see paragraph 0106, 0111, figure10) but does not teach associated data to be reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data. However Sato teaches associated data to be reproduced in the same reproduction time-line with the AV data, and the associated data is reproduced by switching with the AV data (see column3 line14-37).

One of ordinary skill in the art at the time the invention was made would have been motivated to reproduce associated data with AV data in same reproduction time-line (time-base) as in Sato in to Sugahara because it would improve encoding a bit stream for multi-angle connection (see Sato, column3 line 14-17).

Regarding claim19, Sato teaches the method as set forth in claim 1, wherein: the partial AV data is constituted by the integral number of individually reproducible units (see column3 line 14-37).

Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, absent unexpected results to the contrary.

***Allowable Subject Matter***

Claim20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIRUMSEW WENDMAGEGN whose telephone number is (571)270-1118. The examiner can normally be reached on 7:30-5:00, M-F, alr Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tran Thai can be reached on (571)272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Girumsew Wendmagegn/  
Examiner, Art Unit 2621

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2621